

# **Indiana Pension Funds: Expanding the Impact of Equity**



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**Indiana Pension Funds:**  
**Expanding the Impact of Equity**

**May 2000**

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The Indiana Fiscal Policy Institute (IFPI), formed in 1987, is a private non-profit governmental research organization. It is the only independent statewide source of continuing research into the impact of state taxing and spending policies in Indiana. The IFPI is privately supported by a variety of organizations, corporations, associations, and individuals in Indiana and surrounding states. Contributions to the IFPI are fully deductible under section 501 (c)(3) of the Internal Revenue Code.

## **Foreword**

In November 1996 Indiana citizens voted to change the State's Constitution to allow its public pension funds to invest in equities (stocks). Three and one-half years have past and Indiana's two largest pension funds have moved billions of dollars out of bonds and into public equities. With such a substantial amount of taxpayer funds involved in this change and with hundreds of thousands of public employees' pensions at stake, a much needed evaluation of the State's public equity investment performance is given in this report.

Though Indiana pension funds have caught up with the rest of the country in their ability to invest in public equities, another type of investment that most states use still lies ahead for Indiana funds to embrace – private equity. Over the past twenty years most states have begun investing in private equity after learning of its historically high investment returns and risk reducing characteristics when added to a diversified portfolio. In a similar approach to our 1996 study on public equity, this report addresses the benefits and risks of private equity investing and reports on other states' approach to the asset class.

In addition to being an attractive addition to a diversified pension portfolio, private equity also supports local economic development goals. Indiana is in a race to become the information technology hub of the Midwest. Private equity is the primary source of funding for new technology businesses, and existing technology hot-spots such as Silicon Valley and Boston are not surprisingly home to the majority of private equity partnerships. In a public pension context and consistent with fiduciary duty, we report on what other states are doing to increase private equity investing in their states with the goal of growing a technology-based segment of their economy.

To analyze the performance of Indiana's two largest funds, the Public Employees' Retirement Fund [PERF] and the Teachers' Retirement Fund [TRF], we relied heavily upon data and guidance provided by Diana Hamilton, Director of Public Finance, Bill Butler at PERF, Bill Christopher and Bob Newland at TRF, Pete Keliuotis at William M. Mercer, and Dick Boggs at Burnley Associates. We also want to extend a special thank you to Garth Dickey, former director at PERF and Mary Beth Braitman at Ice Miller Donadio and Ryan for their assistance. Of course, the calculations and conclusions presented in this report are the work of the Indiana Fiscal Policy Institute, as are any errors contained herein.

The Rollin M. Dick Foundation and the Indianapolis Economic Development Council provided funding for portions of this report. The Indiana Fiscal Policy Institute is grateful for this special support and for generous support from all the members of the Institute, which makes our research possible.

## Indiana Pension Funds: Expanding the Impact of Equity Executive Summary

In early 1996 Indiana was one of only three states that prohibited its public pension funds from investing in public equities (stocks). That same year the Indiana Fiscal Policy Institute (IFPI) published a report which demonstrated that if public equities were added to Indiana's public pension funds, investment earnings would increase, overall portfolio risk would be reduced, and taxpayers would save over \$43 billion over the next 30 years. This report recommended that Indiana public pension funds begin investing in public equities, and later that year voters agreed.

PERF began investing in public equities in May of 1997. From this time through December 31, 1999, PERF's equity investments achieved annualized returns of 24.2%, narrowly following the S&P 500's 25.5% annualized gain over that same time period. TRF entered the public equity markets a year later, in August of 1998, and achieved excellent returns through the end of 1999. TRF's public equity investments earned an annualized 28.9% return over this year and a half time period, while the S&P 500 gained 21.3%.

As stocks soared to historic highs in the 1990's, bond returns fell back to near long-term averages, achieving annual returns of less than 7%. Although the markets have at times seemed like a roller coaster, the last three years have been very profitable for stock investors. Because of the large spread between stock and bonds returns during this period, Indiana's pension funds are larger and healthier because of the opportunity to invest in equities. The larger of the two funds, PERF, has an additional \$1,226 million in assets because of equity investing. TRF has earned an additional \$648 million it would not have had – had bonds been the only possible investment. Indiana's two major public pension funds have proven that they are able to invest in stocks, avoid political traps, and achieve comparable returns to the market as a whole – thus saving the taxpayers' money and providing safer pensions for public employees.

<b>Comparison of Rates of Return 1969 - 1998</b>	
<b>Investment Class</b>	<b>Annualized Returns</b>
Private Equity	17.2%
Large Company Stocks	12.7%
Small Company Stocks	12.1%
Long-Term Corporate Bonds	9.1%

Source: Venture Economics 1999, Ibbotson Associates 1999

The success from Indiana's investing in public equities poses the question "Are there other types of investments that will increase investment returns, reduce the risk of Indiana's public pension funds and save taxpayers more money?" There is an asset class that many other public pension funds utilize but Indiana funds do not, and that is private equity.

Private equity investing involves the purchase of a private company's stock, which unlike public equity does not trade on a stock exchange. According to Dun & Bradstreet, 54% of U.S. companies with revenues over \$250 million are

privately owned. These companies have chosen not to issue public stock, and therefore the only way to invest in them is with a private equity investment. Private equity returns have historically exceeded the returns of bonds and public equities as shown in the adjacent chart.

Private equity is also an effective diversification tool that lowers the overall risk of a diversified investment portfolio. A Salomon Smith Barney study shows that adding private equity to a stock and bond portfolio reduces the portfolio’s standard deviation, the standard portfolio risk measurement, while increasing portfolio returns.

Investing is a risk versus return subject area, and private equity has some unique risks that must be carefully managed. However, after weighing the risks and returns of private equity investing, most state pension plans have chosen to invest in the asset class. Public pension plans in 37 states currently invest in private equity, allocating between 1% and 15% of their funds to private equity. Both the number of participating states and the amount allocated to private equity has been growing over the past ten years.

The Impact of Private Equity 1986 - 1998				
Portfolio Composition			Portfolio Results	
Stocks	Bonds	Private Equity	Annual Return	Standard Deviation
50.0%	50.0%	0.0%	13.3%	7.6%
47.5%	47.5%	5.0%	13.8%	7.3%
45.0%	45.0%	10.0%	14.3%	6.9%

Source: Salomon Smith Barney, 1999

**Findings and Recommendations:**

*The citizens and taxpayers of Indiana have greatly benefited from the change in the Constitution allowing the state to invest in equities.* In the 3 years since public equities were added to Indiana’s public pension funds, investment earnings have increased, portfolio risk has been reduced, and the public has saved \$1.8 billion. The additional discretion given to the Boards of Trustees of TRF and PERF has been responsibly used for the benefit of the pension funds’ beneficiaries and ultimately the people of the State.

*Indiana’s public pension funds should begin investing in private equity.* The addition of private equity to the funds’ portfolios will produce benefits similar to those obtained by investing in public equities. Increasing returns and reducing risk is an attractive combination that should be pursued by every prudent investor. Moving quickly to start a private equity program now and taking small, deliberate steps as was done when the State began investing in public equity is an effective and prudent approach.

*The State should seek advice from outside experts in private equity investing.* Private equity investing is more complicated than public equity investing. As a result, more than half of U.S. public pension funds that invest in private equity use an outside advisor. Indiana is inexperienced in the private equity asset class and should follow the same approach it uses to invest in other asset classes – hiring outside consultants to assist in selecting professional investors to develop the private equity program.

*Indiana’s pension funds should put fiduciary duty first in developing private equity programs.* Fiduciary duty mandates that the pension funds be managed for the sole purpose and exclusive benefit of the plan beneficiaries. This requires a private equity investment program that has no constraints but that is well diversified over time, geography, industry and investment type. Private equity investing in Indiana should not be mandated but could be prudent if it is part of a well diversified private equity strategy.

# **Indiana Pension Funds: Expanding the Impact of Equity**

## **I. Introduction**

In 1996, the Indiana Fiscal Policy Institute published a report entitled *Does Equity Investing Pose an Unacceptable Risk for Indiana's Pension Funds?* This report analyzed historical risk and return statistics of public equities (stocks) and reported on other state pension funds' use of public equities. The report concluded that the benefits were great and the risks were low for the State to begin investing its pension funds in public equities.

This report examines the performance of Indiana's pension funds since the 1996 Constitutional change, particularly focusing on the performance of public equity investments. We will examine other types of investments that are frequently used by public pension funds but that are not yet used by Indiana pension funds. This analysis will explore the benefits and risks associated with investing in private equity. In conclusion this paper summarizes other states' experiences in private equity investing and discusses the indirect benefits accruing to states investing in private equity.

## **II. A Review of Indiana's Experience in Public Equity**

Indiana's voters overturned the Constitutional prohibition against public pension funds investing in equity in November of 1996. The change was made to Article XI, Section 12 of the Indiana Constitution which prohibited the State from holding stock in a bank, giving or loaning the credit of the State, or becoming a stockholder in any corporation. With the Constitutional prohibition removed and legislative action during the 1997 session of the General Assembly, the Indiana State Teachers' Retirement Fund [TRF] and the Indiana Public Employees' Retirement Fund [PERF] have moved portions of their portfolios into equity investments.

A change of this magnitude requires a prudent analysis. PERF's portfolio is made up almost entirely of employer-contributed assets, while TRF's asset mix in 1997 was primarily from teacher contributions. TRF is a pay-as-you-go fund, while PERF is actuarially funded. Each fund contracted with consultants to conduct asset/liability and asset allocation studies to analyze the structures of the funds and then match the asset allocations to those requirements. After developing appropriate strategies based on these analyses, PERF entered the publicly traded equity market in the second quarter of 1997 and TRF began investing in equities in August of 1998.

Before the Constitutional change to permit public equity investing, Indiana pension funds were invested exclusively in fixed income securities and cash equivalents. Since the Constitutional change, the two funds have been able to allocate their investments in a way that more closely

resembles the norm of public pension funds. A 1999 report by Greenwich Associates puts the average allocation for all state pension funds to stocks at 59.5% and to fixed income securities at 31.3%, [note Table 2]. The balance of the assets is invested in real estate, private equity, and other instruments, including cash.

**Table 1**  
**Indiana's Major Pension Funds: Asset Allocation - Year End 1999**  
[Dollars in millions]

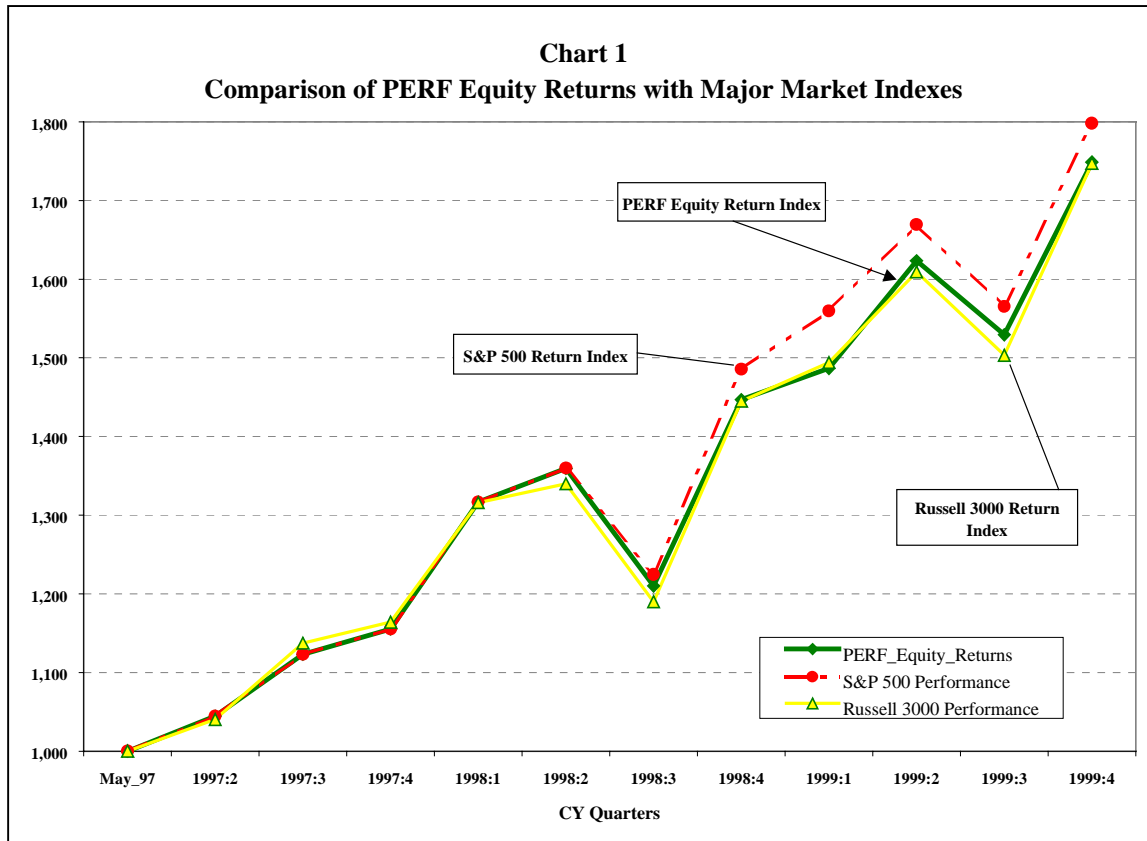
Asset Class	PERF			TRF		
	Portfolio Composition			Portfolio Composition		
	\$ Amount	% of Total	Target_%	\$ Amount	% of Total	Target_%
Large Cap Equity <sup>1</sup>	4,586.6	47.2%	35.0%	1,701.8	31.7%	36.6%
Small Cap Equity	760.9	7.8%	15.0%	347.7	6.5%	5.4%
International Equity		0.0%	10.0%	350.4	6.5%	10.0%
<b>Total Stocks</b>	<b>5,347.5</b>	<b>55.1%</b>	<b>60.0%</b>	<b>2,400.0</b>	<b>44.8%</b>	<b>52.0%</b>
Fixed Income Indexed	2,395.7	24.7%	24.0%		0.0%	16.8%
Fixed Income -- Active	1,894.0	19.5%	16.0%	2,945.7	54.9%	31.2%
<b>Total Bonds</b>	<b>4,289.7</b>	<b>44.2%</b>	<b>40.0%</b>	<b>2,945.7</b>	<b>54.9%</b>	<b>48.0%</b>
Other	75.0	0.8%		16.6	0.3%	
<b>Total Portfolio</b>	<b>9,712.2</b>	<b>100.0%</b>	<b>100.0%</b>	<b>5,362.3</b>	<b>100.0%</b>	<b>100.0%</b>

<sup>1</sup> TRF includes an allocation target of 6% of the portfolio for Real Estate Investment Trusts [REITs]. The target for this asset class is included in TRF's Large Cap Equity target. PERF had no target allocation for REITs, as of 12-31-99.

As Table 1 demonstrates, PERF and TRF have moved substantial percentages of their portfolios into stocks. PERF has 55.1% of its assets in stocks versus a total target allocation of 60%. TRF has committed 44.8% of its assets to equities, with a somewhat broader diversification into international equity as well as small cap. Both funds are reassessing their asset allocation strategies, and more adjustments to the portfolios are being made.

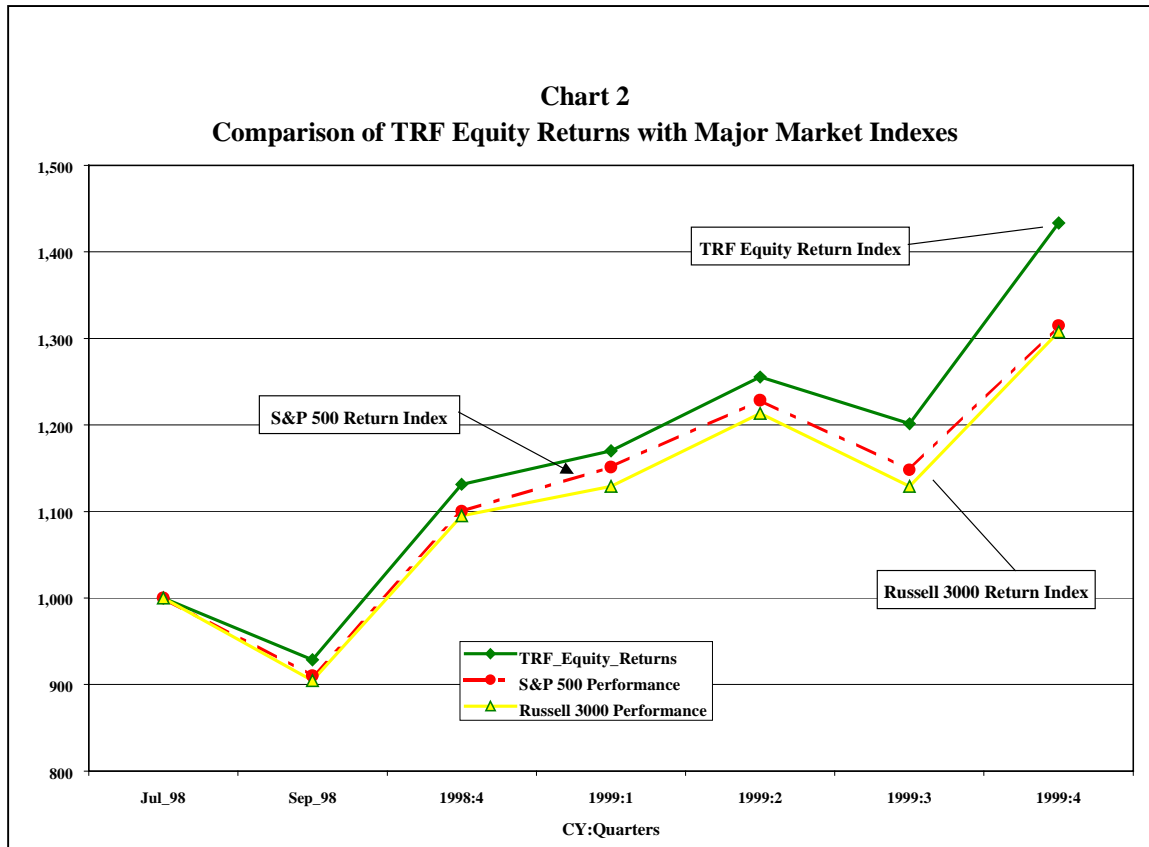
**Investment Performance Since the 1996 Change**

Diversification for the sake of reducing portfolio risk and increasing the investment returns were cited as reasons for the 1996 change to the State's Constitution, allowing TRF and PERF to begin investing in equities. The Indiana Fiscal Policy Institute utilized performance statistics for PERF and TRF to determine how well each fund had fared in its movements into stocks. To compare each fund's performance with the market, an index was created from each fund's quarterly returns and the quarterly growth for both the S&P 500 and the Russell 3000 [a broader benchmark of the public equity market].



PERF entered the stock market in May of 1997, moving approximately \$100 million per month from its bond portfolio into stocks. PERF began investing in funds that closely mirrored the S&P 500 index. Then in June of 1998, PERF also began moving dollars into small cap funds. The objective was to avoid “timing the market” and to begin moving quickly. During a period in which the stock market has experienced uncharacteristically high annual gains, PERF’s portfolio has grown right along with the rest of the market. From June of 1997 through December 31, 1999, the S&P 500 grew at an annualized rate of 25.5%. For the same period, PERF’s annualized returns were 24.2%, behind the S&P 500 index but slightly ahead of the Russell 3000 at 24.1%.

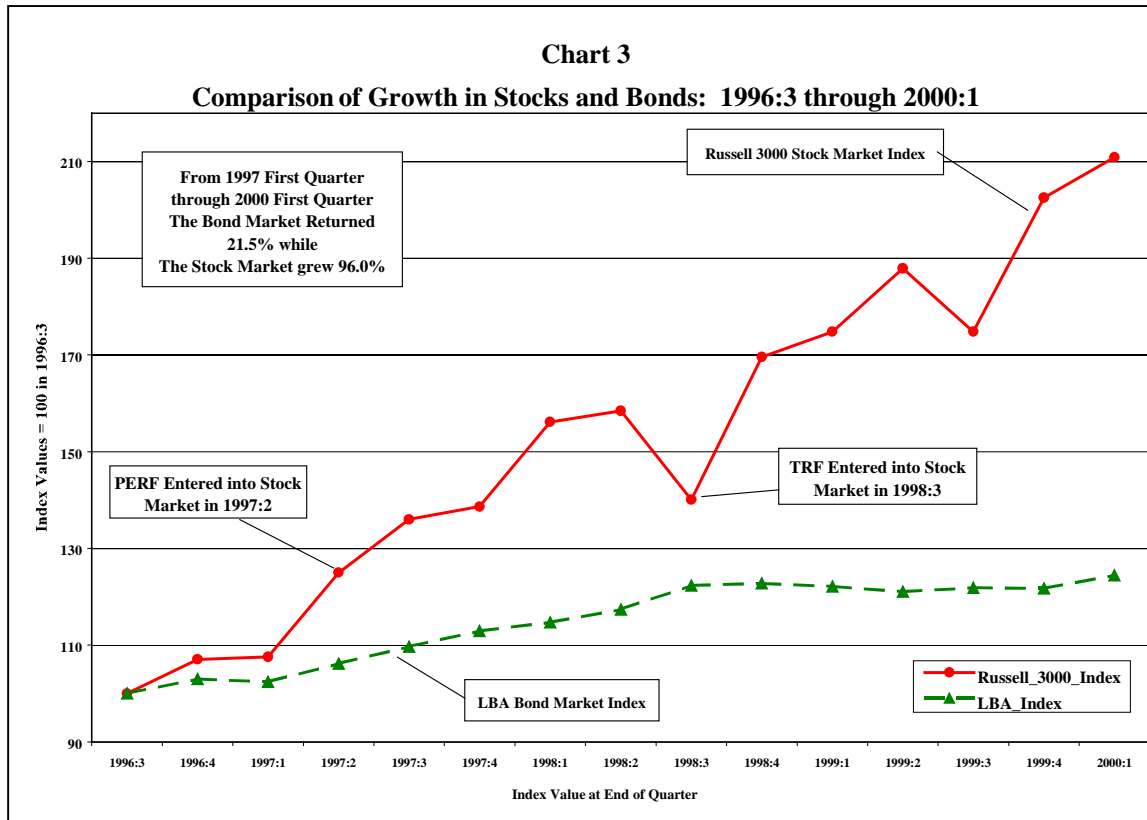
TRF, because of its heavy percentage of employee funds, waited a little longer to actually begin moving its assets from fixed income instruments to stocks. When TRF began investing in equities, it moved rapidly, investing in domestic small cap and international stocks, in addition to domestic large cap equities. The initial purchases were made in August of 1998, during a period in which the market had fallen by almost 12% [as measured by the Russell 3000, shown in Chart 2]. The timing turned out to be propitious. Through the end of 1999, TRF’s return on the equity portion of its portfolio was 43.3%, as measured from the funds’ entry into the stock market, or annualized at a 28.9% rate. During the same period, the S&P 500 gained an annualized 21.3%.



The Benefits to Public Employees and to Taxpayers

In the Indiana Fiscal Policy Institute’s 1996 report on public equity investing, two benefits from the investment in public equity were highlighted. The first, higher returns, has been demonstrated in the performance analysis above. The case however is even more compelling when the stock returns are compared with the bond returns for the same funds over the same periods.

The period from the late 1970’s through the early 1990’s was the greatest “rally” in the bond market that the U.S. has ever experienced. Bond yields came very close to the returns historically experienced only in the equity markets. From 1980 through 1993, the Lehman Brothers Aggregate Bond Index [LBA], a broad measure of the bond market, returned 12.6% per year. The last 5 years, 1995 through the end of 1999, have not been as kind to fixed income investments – with the LBA index returning only 6.65% per year. Had not the Constitution been changed in 1996, the only place for Indiana’s pension funds to invest would have been in fixed income securities. Therefore, a fair measure of the near term value of the Constitutional change is to calculate what a pension fund would have earned had its entire portfolio still been invested in bonds. When that calculation is performed over the last three years, PERF is shown to have gained \$1,226 million and TRF \$648 million in additional assets due to investing in stocks. These are funds Indiana taxpayers would have eventually had to pay, had not the avenue been opened for equity investing. In other words, in only the first three years since the Constitutional change, equity investing has saved the State \$1.874 billion.



Safety Amidst Turmoil

The second benefit from equity investing is greater diversification. The measure of risk for an investment portfolio is the variation in the values of the underlying securities. The greater variation in the stock index [Russell 3000] shown in Chart 3 compared to the smoother line for the Lehman Brothers Aggregate Bond Index demonstrates the differences in risk between stocks and bonds. When a pension plan has both stocks and bonds in its portfolio, the now diversified fund actually exhibits less risk, due to the fact that stocks and bonds tend to move differently in the financial markets – when one is up, the other is down or flat. Diversification between stocks and bonds allows PERF and TRF to exhibit a lower level of “portfolio risk.” This means that the funds are in fact safer now than they were prior to the Constitutional change.

Although this report utilized data through the end of calendar year 1999, the financial markets have made headlines a number of times this year. The technology sector lost ground and persistent signs of inflation have produced swings in both the equity and fixed income markets. Chart 3 demonstrates the growth in the equity market since PERF and then TRF began buying stocks. As of March 31, 2000 the Russell 3000 index had grown by 80.2% since PERF entered the stock market and 54.9% since the time TRF made its entrance into equities. As of April 30, 2000 the Russell 3000 was essentially unchanged from its 1999 year end value, having only increased by 1.4% in the first four months of 2000. The strength of pension fund investing is that pension systems have the luxury of waiting out the short-term fluctuations in the market. This analysis demonstrates that with equities a part of these pension systems’ portfolios, their performance over the long term will be even stronger.

### III. Investigating Other Investment Alternatives

The decision to invest Indiana pension funds in public equities proved to be a wise one, and Indiana taxpayers and public employees of this and future generations will have more money in their pockets as a result. The success derived from State pension fund investments in public equities illustrates the return enhancing and risk reducing benefits available when certain asset classes are added to an investment portfolio. This poses the question: Are there other asset classes available in the investment universe that could further increase the returns and reduce the risk of our State pension funds?

To answer this question, the IFPI examined numerous studies of public pension funds, interviewed 33 public pension fund managers and 23 pension fund consultants and investors. Through this research, we found that private equity is the most popular asset class used by public pension funds that is not yet used by Indiana funds. Therefore we will focus the remainder of this report on private equity, its mechanics, its benefits and its risks. We will also summarize other state pension funds' experiences in private equity and offer recommendations for a best practices approach to investing in private equity. We will conclude with a report of the indirect benefits of private equity investing to the local economy.

#### *Asset Allocations of Public Funds*

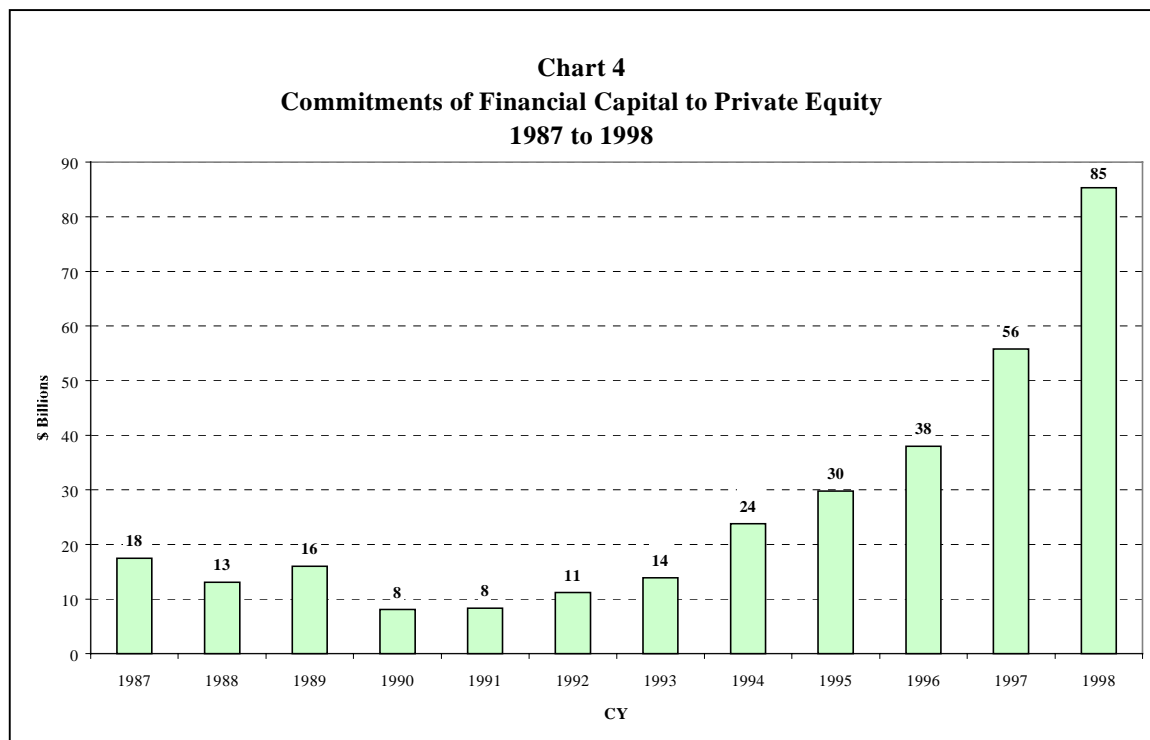
Selecting which asset classes to invest in and to what extent is often considered the single most important component of the investment management process. According to a 1991 study published in the Financial Analysts Journal, the asset allocation decision determines 91.5% of a fund's total investment returns.<sup>1</sup> Since asset allocation is such a significant determining factor of investment results, it is critical that a public pension fund strive to achieve an optimal asset allocation.

<b>Table 2</b>			
<b>Asset Allocation Comparison</b>			
	<b>Average State Pension Fund 12/31/98</b>	<b>Target TRF 4/28/00</b>	<b>Target<sup>1</sup> PERF 4/28/00</b>
U.S. Stocks	48.7%	36%	55%
Bonds	31.3%	48%	32%
International Stocks	10.8%	10%	10%
Real Estate	4.3%	6%	3%
Cash & Other	2.5%	0%	0%
<b>Private Equity</b>	<u>2.2%</u>	<u>0%</u>	<u>0%</u>
	100.0%	100.0%	100%

<sup>1</sup> The Board of Trustees for PERF adjusted the target allocations at the April 2000 Board meeting. These targets reflect those decisions.  
Source: Greenwich Associates 1999, TRF and PERF investment policies.

<sup>1</sup> Gary Brinson, Brian Singer and Gilbert Beebower, "Determinants of Portfolio Performance II: An Update," *Financial Analyst Journal*, May/June 1991, Vol. 47, Issue 3, p. 40-48.

The Greenwich Associates study shown in Table 2 illustrates that private equity is the only major non-cash asset class that the average state pension fund invests in but that Indiana avoids. There are at least 75 public pension funds representing 37 states that have allocated public pension funds to private equity.<sup>2</sup> A list of these public funds is presented in Appendix A. Of the public pension funds that invest in private equity, a Goldman Sachs/Frank Russell survey found that these funds allocated an average of 5.6% of their funds to private equity in 1999, up from 4.9% in 1996.<sup>3</sup> Clearly private equity is a widely accepted investment alternative for public pension funds, and as shown in Chart 4, its use is on the rise.



***So what exactly is private equity?***

Before defining private equity, it is important to define alternative investments. Alternative investments are a class of nontraditional investments that include private equity, oil and gas properties, timberland, precious metals and other investments. Private equity comprises the lion’s share of the alternative investments market and is typically the first alternative investment strategy that an institution pursues. As a result, private equity has become synonymous with the term “alternative investments.”<sup>4</sup> Because of private equity’s dominance in the alternative investments market, it is the logical first step for an investor entering alternative investments.

<sup>2</sup> Steven Galante and Keith Moore, “The Directory of Alternative Investment Programs 1999 Edition,” Asset Alternatives Inc., Wellesley, MA, 1999.

<sup>3</sup> *Report on Alternative Investing by Tax-Exempt Organizations*, Goldman Sachs & Co. and Frank Russell Capital, November 1999.

<sup>4</sup> Gary Robertson, “An Introduction to Alternative Investment Strategies,” *The Directory of Alternative Investment Programs*, 1999, p. 16.

In its most basic sense, private equity is the purchase of an ownership stake in a privately held company, similar to the purchase of the stock of a publicly traded company. Unlike public equities, which can be easily purchased through stock markets, private equity investments are individually negotiated contracts with unique terms of ownership.

Investors can make private equity investments directly with companies, however most investors access the private equity market through professionally managed private equity partnerships. A partnership gathers funds from investors, and then seeks out, analyzes, negotiates and monitors private equity investments on behalf of its investors. Due to the structure of this process, investors are effectively investing in blind pools of assets since the investors give the partnership their money before the partnership makes any investments. The first private equity partnership was formed in 1946<sup>5</sup> and today there are over 1,200 private equity partnerships in the U.S.<sup>6</sup>

Private equity investing requires more time and expertise than public equity investing. Analysis of and legal negotiations with a private company requires months of work. Private equity partnerships are experts in business analysis and legal negotiations and therefore good partners for funds wishing to invest in private equity but lacking the time and expertise.

### ***Types of Private Equity***

Private equity comprises a class of investments. Josh Lerner of the National Bureau of Economic Research defines private equity investors as those devoted to buyouts, venture capital, mezzanine and other related private investments. These three major private equity categories are described below.

Buyouts and acquisitions make up the majority of private equity investments on a dollars invested basis. In a buyout or acquisition strategy, the investor seeks to make investments in established companies which have the potential to achieve greater value through strategic initiatives. The investor actively works to increase the company's value and then sell the company for more than its purchase price.

Venture Capital is the best known type of private equity investment. The venture capital investment strategy seeks to provide growth capital to companies in the early stages of development. Because venture capital is used for small companies, individual venture transactions are much smaller but higher in frequency than buyout transactions that are used for much larger companies. This is why the majority of private equity dollars are used for buyouts but the majority of private equity partnerships focus on venture capital.

A typical venture capital partnership will diversify its investments across business sectors and geographic regions, fully expecting that out of 20 private company investments, three might be marginally profitable and one will deliver a huge return [ex: Amazon.com]. Though four out of 20 does not sound like a successful investment strategy, the huge return earned from an early investment in a future successful company usually more than compensates investors for its less profitable investments.<sup>7</sup>

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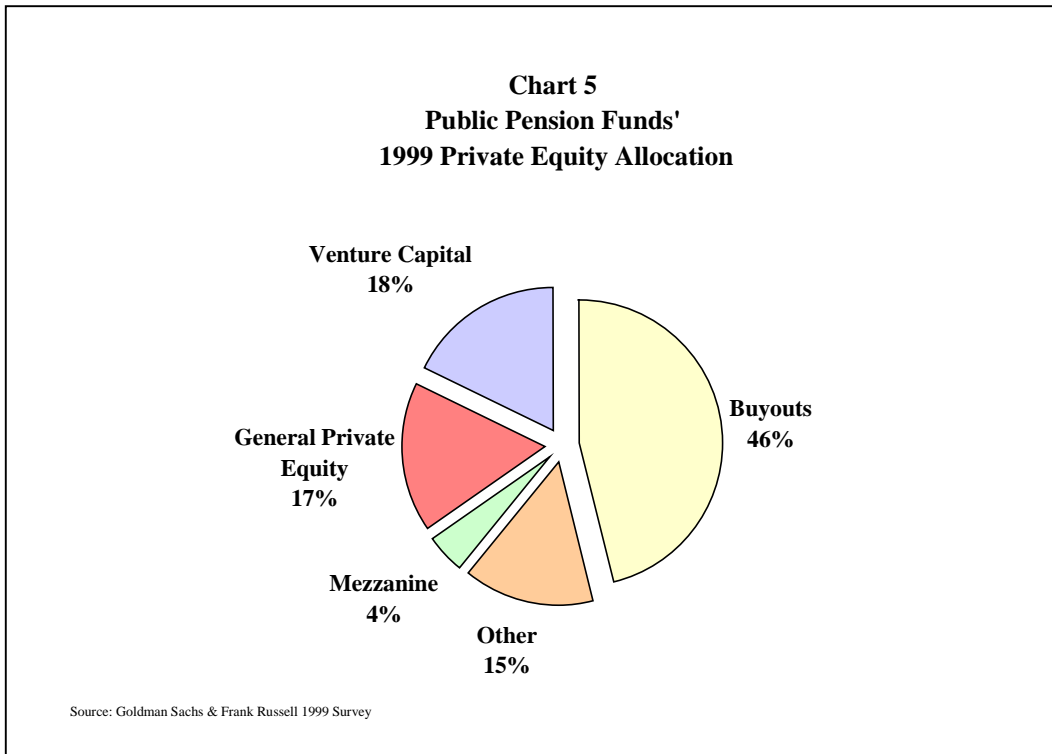
<sup>5</sup> Josh Lerner, "Venture Capital & Private Equity A Casebook," John Wiley & Sons, Inc., New York, 2000, p. ix.

<sup>6</sup> Venture Economics, "Venture Economics: IPO Market Sizzles, Generating Outstanding Returns for Venture Capital Funds," *Venture Economics News*, January 4, 2000.

<sup>7</sup> Ross C. Devol, "America's High-Tech Economy: Growth Development and Risks for Metropolitan Areas," Milken Institute, Santa Monica, CA, July 13, 1999, p. 46.

Mezzanine investing is much smaller than buyouts and venture on both a dollars invested and partnerships formed basis. Mezzanine involves a loan or an equity investment with a company, usually in the form of subordinated debt or preferred stock. These investments typically earn a current coupon or dividend in addition to carrying an option for common stock conversion if the investor so chooses. Mezzanine investments are typically lower risk and lower return than other private equity strategies because they generate current income and have a more protected position in a company's capital structure.

A 1999 survey of public pension funds that invest in private equity found that on average their private equity investments were distributed as follows: 46% to buyouts, 18% to venture capital, 4% to mezzanine financing, 17% to general private equity, and 15% to other strategies. These other strategies include investments in oil and gas partnerships, timberland, agricultural land, derivatives, and economically targeted investments.



***Why are so many other states investing in private equity?***

At least 37 of the 50 states have allocated public pension funds to private equity. Though their reasons for investing in private equity vary, most are seeking additional investment opportunities that increase investment returns and lower risk for their fund.

Access to more opportunities

According to Dun & Bradstreet, there are approximately 7,400 companies in the United States with annual revenues in excess of \$250 million. Of these, only 46% are publicly traded entities while 54% are private companies. Of companies with \$10 million to \$249 million in annual revenues, only 16% are public while 84% are private. An equity investor that is restricted from investing in private companies therefore misses the opportunity to invest in over half of the companies in the U.S.

High Returns

In a 1999 Goldman Sachs/Frank Russell survey of U.S. institutional investors, the number one answer to “Why do you invest in alternative investments?” was “To achieve higher returns than those achieved by traditional investments.” Private equity has historically achieved superior long-term returns compared to public stocks and bonds. Venture Economics reports that from 1969-1998, private equity achieved annualized returns of 17.2%.<sup>8</sup> This exceeds historical returns for public equities of 12.1% and 12.7%, and bonds of 9.1%.<sup>9</sup>

Risk Reduction

Financial experts explain the relationship between financial returns and risk by reference to modern portfolio theory, developed in the mid-1950’s by economist Harry Markowitz. Markowitz demonstrated that “Because the performance of separate asset classes is affected by different factors, their rates and patterns of return are distinct from one another.”<sup>10</sup>

<b>Investment Class</b>	<b>Annualized Returns</b>
Buyouts	19.7%
Venture Capital	14.9%
Mezzanine	11.2%
All Private Equity	17.2%
Large Company Stocks	12.7%
Small Company Stocks	12.1%
Long-Term Corporate Bonds	9.1%

Source: Venture Economics 1999, Ibbotson Associates 1999\*

Statistically, the difference in rates and patterns of return is measured by the correlation of the returns of one asset class with another. Correlation is calculated within a band of +1.0 to -1.0, whereby the degree of positive correlation is highest at +1.0 and the degree of negative correlation is highest at -1.0. Asset classes whose performances do not move together have a zero correlation. Modern portfolio theory suggests that when adding new asset classes to a portfolio, the lower the correlation of the asset to the existing investments, the more stability and less risk the portfolio will possess once the asset is added.

\* Stock and bond statistics from Ibbotson. All private equity statistics from Venture Economics using BLNC pooled figures. Most consultants use upper quartile returns instead of pooled returns since the upper quartile represents the universe of professionally managed private equity partnerships from which consultants select. Upper quartile returns for buyouts, venture, mezzanine and all private equity from 1969-98 were 18.6%, 22.6%, 23.5%, and 20.8%, respectively.

<sup>8</sup> Venture Economics, “1999 Investment Benchmarks Report,” Thomson Financial, New Jersey, 1999, p. 277.

<sup>9</sup> Roger G. Ibbotson and Rex A. Sinquefeld, “Stocks, Bonds, Bills and Inflation [SBBI] Yearbook,” Ibbotson Associates, Chicago, IL, 1999.

<sup>10</sup> Kathryn J. Engebretson, “A Multi-Asset Class Approach to Pension Fund Investments,” *Government Finance Review*, February 1995, p. 11.

**Table 4**  
**Historical Correlation Statistics**

	Private Equity	Large Stocks	Small Stocks	Corp Bonds	Treasury Bonds
Private Equity	1.00	0.29	0.35	(0.08)	(0.11)
Large Stocks		1.00	0.75	0.35	0.33
Small Stocks			1.00	0.20	0.15
Corp Bonds				1.00	0.97
T-Bonds					1.00

Source: Venture Economics 1999

This line of reasoning was the primary evidence relied upon that justified PERF and TRF’s entrance into public equities in 1996. Returns of large stocks and corporate bonds are correlated by only .35, and this relatively low level of correlation has lowered portfolio risk substantially since stocks have been added to TRF and PERF portfolios. This same argument is even stronger for private equity, as it has only a .29 correlation with large stocks and is

negatively correlated with bonds. This illustrates that private equity is a very different type of investment than stocks and bonds, and its diversification benefits with existing asset classes held by TRF and PERF make it an attractive addition to Indiana’s pension funds.

One major reason why return patterns of private equity are so different than public equity and bond returns is the impact of inflation. Over the past 30 years, the stock market has tended to decline whenever there have been fears that inflation would rise. Due to their fixed payment nature, bonds have always been negatively impacted by inflation. Private equity however has proven to have no correlation or even a slightly positive correlation with inflation.<sup>11</sup> This inflation factor is one reason why private equity acts so differently than stocks and bonds and why it [along with Treasury Inflation Protected Securities] is often used to protect a portfolio from inflation.

Further evidence of private equity’s effect on a portfolio is displayed in Table 5. Salomon Smith Barney performed several simulated portfolio scenarios for the time period 1986 to 1998. The results of this simulation show that when a 50% stock/50% bond portfolio allocated 10% of its funds to private equity, annualized returns increased from 13.3% to 14.3% while standard deviation [the risk measurement] was reduced from 7.6% to 6.9%.<sup>12</sup>

**Table 5**  
**The Impact of Private Equity**  
**1986 - 1998**

Portfolio Composition			Portfolio Results	
Stocks	Bonds	Private Equity	Annual Return	Standard Deviation
50.0%	50.0%	0.0%	13.3%	7.6%
47.5%	47.5%	5.0%	13.8%	7.3%
45.0%	45.0%	10.0%	14.3%	6.9%

Source: Salomon Smith Barney, 1999

<sup>11</sup> Scott Lummer, “Navigating Alternative Assets,” *Association for Investment Management and Research*, 1997.

<sup>12</sup> L. Michelle Morris and James Beck, “Adding Value to Investors’ Portfolios: The Potential of Private Equity,” Salomon Smith Barney, 1999.

## ***Risks of Private Equity***

Though the benefits of adding private equity to a stock and bond portfolio appear to be great, a complete evaluation of private equity is not complete without a discussion of the risks of private equity investing.

### Illiquidity

Liquidity is the ability to quickly convert an investment to cash at close to its fair market value. Since private equity investments are unlisted securities, they are inherently illiquid. There is no public market for private equity securities, and it can take a long time to find a buyer willing to pay cash for a private equity investment. For investors that may need to convert investments to liquid funds in a short time period, private equity's illiquid nature is an important risk to consider. However, for pension funds and other large institutional investors with predictable pay-out schedules, allocating a small portion of the fund to private equity is prudent and mitigates this illiquidity risk.

### Volatility

Research from the Yale Investment Office shows that private equity has historically achieved a real annual return of 20%, slightly higher than the 17.2% return calculated by Venture Economics. Yale also calculates that private equity's standard deviation is approximately 50%. In statistical terms, this means that there is a two-thirds probability that private equity's return will range from minus 30% to plus 70% in a given year – an extraordinary dispersion.<sup>13</sup> If a pension fund were to invest only in private equity, this would be a very important risk to evaluate. However, when private equity is added to a diversified portfolio, overall portfolio volatility is actually reduced due to private equity's correlation characteristics.

### Little Historic Risk and Return Data

Public market investments can be approached quantitatively. Daily pricing and large amounts of historical data make risk and return expectations readily understandable and documentable. Private market investment analysis is more qualitative than quantitative since private equity partnerships are generally blind pools with no specific assets. Therefore, private equity investors must be much more sophisticated in their investment analysis and monitoring to succeed in this complex asset class. This is why many public pension funds use professionally managed private equity partnerships to access this asset class.

### Private Equity Market Dynamics and Trends

The pool of U.S. private equity funds grew from \$5 billion in 1980 to over \$175 billion in 1999. Private equity's recent growth has outstripped that of almost every other class of financial product. Periods with rapid increases in capital commitments have historically led to fewer restrictions on private equity partnerships and lower returns for investors. These patterns have led many practitioners to conclude that the industry is inherently cyclical. In short, this view implies that periods of rapid growth generate sufficient problems that periods of retrenchment are sure to follow. These cycles may indicate sub-par returns for private equity in the short term.<sup>14</sup>

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<sup>13</sup> David Swensen, "Does Venture Make Sense for the Institutional Investor? Part I," *Association for Investment Management and Research*, 1998, p. 48.

<sup>14</sup> Josh Lerner, "Venture Capital & Private Equity A Casebook," John Wiley & Sons, Inc., New York, 2000, p. ix.

In addition, many top tier private equity partnerships have never accepted institutional money, others are closed to new participants, and many of those accepting new partners take limited amounts of money. A new entrant into private equity investing may well be selecting from a universe of funds that excludes the most experienced and most successful private equity investors. A potential private equity market peak and potential exclusion from the best partnerships are risks for late entrants into private equity like Indiana pension funds.

### Political

Quite possibly the biggest risk to public pension funds investing in private equity is one of a political nature. Private companies and private equity partnerships actively seek out capital from a variety of sources including public pension funds to execute their business strategies. The competition for public pension investment dollars is intense, and some will attempt to use political influence to increase their chances of success. To guard against this, the private equity investments, as with all public pension investments, must be managed in accordance with fiduciary duty.

### ***Fiduciary Duty***

In light of the benefits and risks of private equity previously discussed, it is important to briefly revisit the fiduciary duties of those overseeing Indiana's pension funds. Pension fund trustees are subject to general oversight provisions and fundamental fiduciary rules under the Internal Revenue Code. Those rules include the "exclusive benefit" rule that prohibits any funds from being used or diverted to any purpose other than the exclusive benefit of the members and their beneficiaries.

In addition, the State's statutes require the trustees of PERF and TRF to observe what is called the "Prudent Investor Rule" in their governance of Indiana's pension funds. This provision is a strict standard of governance that mandatorily applies to private pension systems, and is the standard recommended by the Uniform Law Commissioners for public pension management. This standard dictates how the trustees of a pension plan must execute their fiduciary responsibility. The Prudent Investor Rule requires the fiduciary to evaluate the risk and reward of the fund investments, as well as appropriate protections and diversifications.

This standard as applied to Indiana reads as follows:

The Board shall invest its assets with the care, skill, prudence, and diligence that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character with like aims. The Board shall also diversify such investments in accordance with prudent investment standards. IC 5-10.3-5-3(a)

In reviewing the investment strategies of institutions with the character and aims similar to the Indiana public pension funds, it is clear that most invest in private equity. Public pension funds in at least 37 states are private equity investors. The magnitude of private equity participation by other sophisticated institutional investors adds further support. The IBM Retirement Fund and General Motors have each allocated at least \$3 billion to alternative investments, and Stanford and Yale University have each allocated at least 20% of their portfolios to alternatives.

The second clause of Indiana's fiduciary standard is directed toward diversifying investments and is also consistent with private equity investing. Private equity would diversify Indiana's pension funds while increasing investment returns and reducing risk - an attractive combination that all prudent investors should pursue. So long as a responsible approach to private equity investing is implemented and monitored for the sole benefit of the pension members and beneficiaries, private equity investing does not violate Indiana's fiduciary statutes.

#### **IV. The Process of Investing in Private Equity**

The process that public pension funds use to invest in private equity differs dramatically from the approach used to invest in other asset classes. The following is a chronology of how a state invests in private equity.

##### ***Steps for State Pension Funds to Invest in Private Equity***

###### **1. Evaluate the advantages**

A pension fund initially becomes involved in private equity by learning of the benefits of adding private equity to its existing fund. These benefits include increased investment opportunities, increased returns and reduced portfolio risk.

###### **2. Discuss the process with a number of advisors**

The second step to investing in private equity is to discuss the asset class with a number of advisors. These advisors can begin to formulate asset allocation studies and strategic alternatives for pension fund managers and trustees to evaluate.

###### **3. Perform an Asset allocation study**

The benefits of adding private equity to a pension fund can vary depending on the make up of the existing fund. By performing an asset allocation study, professional consultants can find the level of private equity investing that will maximize the fund's returns and minimize its risks in light of the pension fund's other investments.

###### **4. Determine a strategy**

Once a fund has selected an asset allocation strategy, it then knows the amount of funds which it will invest in private equity. Several different strategies are available for accessing the private equity market, and the choice is primarily driven by the projected dollar amount of private equity investing and the level of control desired over the investment decision-making. Upon making these two decisions, a pension fund selects a strategy and any strategic partner needed to execute the chosen strategy.

###### **5. Commit funds**

Finally, the pension fund commits money to the asset class and monitors its private equity investments. Unlike other asset classes in which a pension fund can invest all of the targeted allocation in one year, private equity investors spread out their investments over a number of years. By staggering private equity investments over time, the pension fund gains exposure to a number of different partnerships that will make investments and cash out of them at different points in the business cycle. This time diversification technique is the best way for a pension fund to diversify its private equity investments and smooth out its private equity returns.

## ***Strategy Alternatives***

Public pension funds use a variety of strategies to access the private equity market. Determinants of which strategy to use include the amount of funds committed to private equity and the control desired over the investment process. There are five strategies available to public pension funds, and they lie on a continuum from a small amount of committed funds and little internal control to huge dollar amounts committed to private equity and substantial internal control and expertise.

### Fund of funds

Private equity fund of funds serve a role in the private equity market similar to mutual funds for individual investors. A fund of funds is a commingled pool of funds which is professionally invested in a number of private equity partnerships. Fund of funds investors are treated equally, with each receiving instant diversification through its pro rata share of each partnership investment. Fund of funds also do much of the back office paperwork for its investors, which can be substantial in this asset class. Another important advantage of fund of funds is the potential access provided to top tier partnerships. As previously stated, public pension funds new to the asset class are shunned by some private equity partnerships. One way to get around this is by investing in a fund of funds that has a history of investing in some of the best private equity partnerships.

To invest in a fund of funds, investors make a one time investment decision and then hand over the allocated money to the fund of funds. This saves the time of internal staff and board trustees that would otherwise need to approve all private equity partnership investments. Fund of funds charge a fee to select and manage private equity partnership investments, which when added on top of the fees charged by the private equity partnerships makes this the most expensive private equity strategy available. The fund of funds strategy is most frequently used by investors with little capital in private equity, little internal expertise, or limited access to desired partnerships.

### Gatekeepers

A gatekeeper is a discretionary advisor serving in a similar role to a fund of funds. Gatekeepers also only require a one-time decision by investors. Once the asset allocation to private equity has been determined and a gatekeeper has been selected, the pension fund hands over the money designated for private equity to the gatekeeper. The gatekeeper then has full discretion to invest the pension funds in the private equity partnerships it selects.

One major difference between a gatekeeper and a fund of funds is that the gatekeeper can customize a private equity investment strategy for each client while a fund of funds puts all clients into the same partnerships on a pro rata basis. Gatekeepers do less of the necessary paperwork for tracking private equity investments than does a fund of funds and charge a fee lower than fund of funds fees.

Both gatekeepers and fund of funds help institutions gain a better understanding of the private equity market through their educational efforts. Pension funds new to the asset class can learn a great deal about private equity by watching these professionals evaluate and select partnerships, negotiate partnership terms, monitor fund performance and attend advisory board meetings.

Advisors

Similar to the strategy used today by TRF and PERF for its public equity investing, private equity advisors are paid a fee to recommend private equity partnerships for investment. Unlike gatekeepers who have full discretion over the dedicated pension funds, advisors merely suggest investments and the pension funds have final say on the private equity managers selected. Usually the advisor performs the initial screening of partnerships and develops a short-list of recommended partnerships that the pension fund can interview itself. Advisors also attend partnership annual meetings and serve as an additional relationship contact for the partnerships, thereby freeing up the time of pension fund managers.

In-house partnership selection

A pension fund that implements this strategy uses no outside advisors, but relies entirely on its internal staff for all investment decision making. The internal staff selects private equity partnerships, which is much more difficult than selecting public equity or bond managers because historical information on each private equity manager is more difficult to obtain and evaluate. Pension funds using this strategy need a large and very sophisticated internal staff, which is usually economical only if the pension fund has substantial funds dedicated to private equity. In addition to saving on outside advisor expenses, this strategy allows the pension fund to have total control over the selection of private equity partnerships.

Strategy	Advantages	Disadvantages
Fund of funds	Access to top tier funds Opportunity to learn from experts One time investment decision	Highest fees No influence over partnerships selected Locked in long term
Gatekeeper	Customized program Opportunity to learn from experts One time investment decision	High fees Little influence over partnerships selected
Advisor	Cheaper than gatekeeper or fund of funds Opportunity to learn from experts Control over partnerships selected	Requires skilled in-house staff Potential for special interest influence
In-house Partnership Selection	Low fees Control over partnerships selected	Requires very skilled in-house staff Potential for special interest influence
Direct Investments	Lowest fees Control over which companies are invested in	Requires extremely skilled in-house staff Potential for special interest influence Historical losses in other states

Direct investments

Finally, the most risky and challenging strategy is for a pension fund to make direct investments in private companies. Though both this strategy and the previous one rely totally on internal staff, in the previous strategy internal staff select professional partnerships that then make the direct investments in private companies. However, this direct investment strategy skips that step and cuts out all middlemen and their associated fees by relying on an internal staff to evaluate and structure their own investments in private companies.

According to the Goldman Sachs/Frank Russell survey of private equity institutional investors, 7% of public pension funds use a fund of funds, 52% use an advisor or gatekeeper, and 14% invest directly in private companies.<sup>15</sup>

<sup>15</sup> *Report on Alternative Investing by Tax-Exempt Organizations*, Goldman Sachs & Co. and Frank Russell Capital, November 1999, p. 17, 23.

### ***Private Equity Experiences in other States***

Nearly every state in the U.S. has considered private equity investments for its public pension funds and most states have chosen to invest in the asset class. Appendix B summarizes 19 public pension plans including their asset size, actual and target private equity allocation, annualized returns on private equity investments, and strategy used. While most states have been very successful in their private equity investing, a few states have failed in their efforts. The following describes some of these private equity failures and successes.

#### Failures

The **Kansas** Public Employees' Retirement System [KPERS] is the poster child for failed public pension investing in the private market. Its program began in 1985 when Kansas enacted a law that required KPERS to invest 10% of its fund in private loans to Kansas businesses. In 1988, KPERS entrusted two investment firms with \$300 million to execute KPERS's desired strategy. One of the investment firms loaned \$65 million of KPERS funds to a Savings & Loan that was deemed insolvent just a few years later. KPERS was advised to invest in two other companies that also failed soon after KPERS's initial investment, and as a creditor KPERS was forced to shut these companies down. Over 700 Kansas residents lost their jobs due to these closings, and the state was embarrassed politically. In 1991, the state put a moratorium on KPERS's private investments program.

A lack of oversight by KPERS of its private investments program was blamed for the investment losses. Additionally, the investment advisors were accused of benefiting themselves and ventures they had interests in to the detriment of the KPERS fund. At least \$70 million has been recovered from the investment advisors through legal action.<sup>16</sup>

Despite the substantial losses KPERS incurred from its private investments program, KPERS's managers and trustees understood that an appropriately run private equity program would provide great benefits to the pension fund. Therefore in 1997 KPERS returned to the private equity asset class with an approach that more closely adhered to the fund's fiduciary duty. The most important changes KPERS made were the repeal of its in-state investment mandate and the prohibition of direct investments. KPERS no longer considers geographic or economic development factors when evaluating investment alternatives, but seeks only to maximize risk-adjusted returns for pension beneficiaries. KPERS is also no longer allowed to make direct investments in companies, but must invest through partnerships with the assistance of a specialized, non-discretionary advisor. In addition, KPERS:

- increased the reporting requirements to its board of trustees and now explains exactly how each of its private equity partnership investments is performing,
- changed the make-up of its board of trustees from seven Governor appointees to four Governor appointees, the State Treasurer, two members chosen by employees, and one each by the House and Senate,
- increased its internal staff to eight, two of which are solely responsible for the KPERS private investments program, and
- is bound by statutory limit that private investments not exceed 5% of the total fund.

In 1990, the State of **Connecticut** Trust Fund [CTF], in an effort to save jobs within its state, invested \$25 million in Colt Manufacturing, a leading Connecticut employer. Colt went bankrupt in

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<sup>16</sup> *Kansas Pension System Settles Claim*, Reuters, January 21, 2000.

1993 and the state lost most of their initial investment.<sup>17</sup> Today, CTF uses an internal staff to select private equity partnerships and fund of funds, but no longer makes direct investments in companies. CTF's private equity allocation can range from 0-12% of the total portfolio, and CTF's private equity investments have achieved a 15.6% annualized return over the past five years.

The **Iowa** Public Employees' Retirement System [IPERS] selected a California partnership to administer its \$15 million Heartland Seed Fund which was to finance early- and initial-stage technology businesses located in Iowa. In its first three years, the partnership made only one investment. The following year, IPERS terminated the Heartland Seed Fund and initiated a lawsuit against its managing partnership. Additionally, political forces pressured IPERS to invest in two Iowa-based private equity partnerships. To date, these two partnerships are IPERS's two worst performing private equity partnership investments.

Today, Iowa Code 97B.7 directs IPERS to invest "...in a manner that will enhance the economy of the state, and in particular, will result in increased employment of the residents of the state," when such investments can be accomplished in a manner consistent with other investment guidelines and the Prudent Person rule. As of June 30, 1999, IPERS had invested \$905 million in Iowa related public stocks, \$102 million in Iowa related bonds, but just \$34,000 in Iowa based private debt and equity.<sup>18</sup>

The **Missouri** Public Employees' Retirement System [MPERS] was obligated by state law to invest 3-5% of its assets in small businesses located in Missouri. MPERS organized Missouri Venture Partners [MVP] to perform this duty. All investment decisions were made by MVP without MPERS approval. In its first two years, MVP made investments in five private companies, two of which filed for bankruptcy soon thereafter. At that time, MPERS decided to cancel its MVP arrangement due to lack of investment control. Litigation followed. Three years later in 1992, the law requiring in-state investments was repealed. Today MPERS is not active in the private equity asset class.<sup>19</sup>

**Lessons learned from the failure cases are:**

1. Public funds with in-state investment mandates or direct investment strategies have been prone to failure and are potentially breaching their fiduciary duty.
2. Public funds without bipartisan, broadly representative pension boards are more open to political influences.
3. Public funds need a knowledgeable internal staff to closely monitor its advisors and partnership investments.

Successes

On the whole, most state pension funds with private equity programs have been very successful in their efforts. The following represents a sample of successful strategies used by public plans for investing in the private equity market.

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<sup>17</sup> Hamilton Lane Advisors, Inc. "The Experience of Certain Public Pension Plans in Economically Targeted Investing," *Economic and Capital Funding Trends in Pennsylvania*, Volume II, page 12.

<sup>18</sup> *Comprehensive Annual Financial Report*, Iowa Public Employees' Retirement System, June 30, 1999, page 59.

<sup>19</sup> Hamilton Lane Advisors, Inc. "The Experience of Certain Public Pension Plans in Economically Targeted Investing," *Economic and Capital Funding Trends in Pennsylvania*, Volume II, page 13-14.

The **Michigan** Department of the Treasury [MDT], which manages Michigan's State Employees' Retirement Funds, has been a private equity investor since 1982. Through its ten person private equity investment staff, MDT selects and monitors over forty private equity partnerships. Additionally, 7.5% of its private equity portfolio is invested directly with companies, most of the time on a co-investment basis with partnerships. Using the co-investment strategy, MDT contributes a small portion of the total investment in a company along side the larger portion contributed by one of its private equity partnerships. With this strategy, MDT reaps the financial rewards of being a direct investor but does not need to serve as the lead manager of the investment since the private equity partnership will serve this role. To provide access to top tier funds and add diversification to its private equity program, MDT also uses a fund of funds.

Without the use of any outside advisors, it is critical that MDT maintain a skilled internal staff. This requires paying internal staff wages that are comparable to private sector wages earned by professional private equity managers. MDT currently allocates 8.9% of the total pension fund to alternative investments and has achieved a ten year annualized return of 16.0% on its alternative investments.<sup>20</sup>

The **Virginia** Retirement System [VRS] uses a unique combination of internal staff and outside advisors for its private equity program. Using two-thirds of the VRS private equity allocation, the internal staff selects and monitors large, well established private equity partnerships, most of which are buyout funds. For its smaller private equity investments, mostly venture capital funds, VRS uses a "gatekeeper" that has full discretion to allocate the other one-third of the VRS private equity allocation to partnerships it selects. This strategy allows the VRS staff to use its time and expertise wisely and rely on outside experts to select investments that are either too small to legitimize internal staff's time or are outside the expertise of the VRS staff. VRS currently allocates 5.4% of its fund to private equity and has achieved a ten year annualized return of 22.7% on its private equity investments.<sup>21</sup>

The **California** State Teachers' Retirement System [CalSTRS] uses a non discretionary advisor to assist in selecting private equity partnerships. Within its 10% targeted private equity allocation, CalSTRS targets 60% of this to buyouts, 16% to venture capital, 15% to international private equity, and 9% to other types of private equity. Over the past ten years, CalSTRS's private equity investments have earned an annualized return of 18.5%.

One key advantage for CalSTRS is its streamlined internal approval process. The Board of Trustees has delegated authority to the CalSTRS internal investment staff which permits an internal approval process to take the place of board approval for investments under prespecified dollar limits. This is especially helpful since the time from a partnership launch to its close is often times less than 45 days. With the delegation of authority in place, CalSTRS can invest in new partnerships any time a new partnership investment opportunity is available. Private equity partnerships greatly value CalSTRS's responsiveness. Because of it, CalSTRS is a favorite with many top tier partnerships that sometimes shun public pension funds.<sup>22</sup>

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<sup>20</sup> *Comprehensive Annual Financial Report*, Michigan State Employees' Retirement System, September 30, 1998.

<sup>21</sup> *Annual Report*, Virginia Retirement System, June 30, 1999.

<sup>22</sup> *Annual Report*, California State Teachers' Retirement System, June 30, 1998. Phone interview with Real Desrochers, CalSTRS director of alternative investments, January 6, 2000.

These success summaries are just a sample of the many successes achieved by public funds in their private equity investing and show that success can be achieved in a number of ways.

**Lessons learned from this section include:**

1. Public funds need to pay wages comparable to the private sector to attract and retain internal talent.
2. A combination of two or more different private equity strategies can work well.
3. Once an internal staff has earned the trust of its board of trustees, delegating authority allows the fund to be a responsive investor, critical for good partnership relations.

***Best Practices***

From evaluating the private equity experiences of other states and from speaking with over 50 industry professionals, we believe that the following represents a best practices plan which would serve Indiana pension funds well as they evaluate entering the private equity market.

1. Commit to private equity for the long term. Pensions are promises to pay workers a portion of their salary during retirement. These are long term obligations and should be matched with long term investments. Long term private equity returns exceed stock and bond returns, and studies show that adding private equity to a stock and bond portfolio actually reduces overall risk. For these reasons, most states invest in private equity. The most successful states have made long term commitments to the asset class and make new private equity investments each year.
2. Use external experts. Private equity is a difficult and complex asset class. In 1997 the top 25% of private equity partnerships achieved at least a 37.4% return while the median private equity return was only 6.2%. Therefore partnership selection is critical and much more difficult than selecting public equity managers. At least until substantial internal expertise is developed, Indiana should rely on advisors, gatekeepers and or fund of funds for assistance in selecting and gaining access into the best private equity partnerships.<sup>23</sup>
3. Develop internal expertise. A pension fund's number of internal private equity specialists can vary depending on how much reliance is placed on outside advisors. However, even if outside advisors make all of the private equity investment decisions for the funds, it is still important that the internal staff and pension trustees be responsible for monitoring the private equity investments. The best way for the staff and trustees to gain an understanding of private equity is by watching and learning from external experts as they make private equity investments for the State's pension funds. Starting now using external advisors and taking small, deliberate steps, as was done when the State began investing in public equity, results in effective learning and prudent investing.
4. Put fiduciary duty first in developing the private equity program. Fiduciary duty mandates that the pension funds should be managed for the sole purpose and exclusive benefit of the plan beneficiaries. This requires a private equity investment program that has no constraints but that is well diversified over time, geography, industry and investment type. Private equity investing in Indiana should not be mandated but could be prudent if it is part of a well diversified private equity strategy.

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<sup>23</sup> Venture Economics proprietary database. Internal Rates of Return based on vintage year.

## V. Indirect Benefits of Private Equity

Up to this point, this report has described private equity, its benefits and risks, and some private equity experiences of other states. Based purely on investment merit, the Indiana Fiscal Policy Institute believes that it would be prudent and beneficial for the State’s pension funds to invest in private equity and has outlined a best practices approach to guide the State’s decision-makers.

However, there is another layer of private equity benefits, indirect benefits to the local economy, that have not yet been covered. Though these economic development benefits should not factor into the decision-making of pension fund managers and trustees, these benefits are relevant to a thorough description of private equity, and thus are explained in this section.

Nearly every state in the U.S. as well as many countries around the world are racing to create and grow a high technology segment of their economy. This rush is fueled by the many benefits to a local economy that result from a growing technology sector including generating wealth, diversifying the tax base, leveraging investments in academic research, and providing jobs for the economy’s most skilled individuals.

Rank	State	VC/GSP
1	Massachusetts	0.62%
2	California	0.50%
3	Colorado	0.34%
4	New Hampshire	0.29%
5	Washington	0.24%
7	<b>U.S. Average</b>	<b>0.17%</b>
15	Illinois	0.11%
23	Kentucky	0.08%
29	Ohio	0.06%
31	Michigan	0.04%
33	<b>Indiana</b>	<b>0.03%</b>

Source: Progressive Policy Institute, 1999

Indiana is a state with a heavy investment in manufacturing and has sought to diversify its economy through the growth of an information technology sector. A critical engine of growth for any information technology sector is the availability of capital, especially venture capital. Young technology companies usually do not qualify for traditional bank loans, and venture capital is the most frequently used way for new businesses to find the funds needed for early growth. A study by the Milken Institute found that if a well-functioning venture capital infrastructure is not in place, a region’s technology sector is at risk of not achieving its potential.

An available pool of venture capital serves a local economy well in many capacities. First, it allows entrepreneurs to quickly find funding for their ideas. This is especially important in technology companies since being first to market is a significant advantage. Second, since venture capitalists become intimately involved with companies they invest in,

the business expertise provided by venture capitalists helps new companies be successful. Finally, a number of studies have shown that venture-backed companies create high growth, high pay jobs at a rate faster than non-venture-backed companies.

Though no study has been done to quantify the shortage of venture capital in Indiana, several studies reveal that Indiana is lacking in the area. The Progressive Policy Institute’s July 1999 Technology & New Economy Project shows that after adjusting for the size of a state’s economy [gross state product], venture capital investments in Indiana severely lag the U.S. average and lag all our neighboring states as well.

Although the U.S. average appears skewed by the top few states, and no consideration is made for the type of economy and related venture capital opportunities in each state, it is clear that Indiana has traditionally not attracted much venture capital.

Another study that provides further evidence of Indiana’s lack of available venture capital is PricewaterhouseCoopers’ MoneyTree Report. This report found that of the 6,000 venture capital investments made in the U.S. in 1999, Indiana accounted for only seven of them and just \$8.3

<b>State</b>	<b>\$ Invested</b> <b>[in mill.]</b>	<b>No. of</b> <b>Deals</b>
Illinois	516	57
Kentucky	85	8
Michigan	72	23
Ohio	66	23
Indiana	5	3

Source: PricewaterhouseCoopers Moneytree 1999

million of the \$35.6 billion of venture capital invested last year. This gives Indiana a 0.12% share of the 1999 venture deals done in the U.S. and 0.02% of venture capital dollars invested. Table 8 shows the third and fourth quarter 1999 results of the MoneyTree study and illustrates that again Indiana lags its neighbors in attracting venture capital investments. This relative lack of venture capital puts Indiana at a disadvantage in creating jobs and new businesses.

***Economically Targeted Investments***

One option some states have pursued to promote venture capital investments within its state is the use of economically targeted investments [ETIs]. Generally speaking, an ETI is:

- an investment which provides a competitive risk-adjusted market rate of return,
- creates a collateral economic benefit to a targeted geographic area or sector of the economy, and
- is usually carried out by an outside investment manager, not the pension fund’s internal staff.

ETIs were born as a product of the 1970s when state pension assets grew dramatically and some observers began to see these funds as mechanisms for achieving socially and politically desirable objectives. Early efforts excluded from pension portfolios companies with “undesirable” characteristics, such as those facing labor problems or holding investments in South Africa. The focus shifted in the 1980s as public pension funds began favoring investments that would foster goals such as economic development and home ownership.

At that time, advocates prospectively contended that these goals could be achieved without any financial sacrifice. However analysis of investment results demonstrated that targeting of investments had sacrificed some return. A survey of state-administered pension funds showed that 10 states either inadvertently or deliberately sacrificed return, approximately 200 basis points or 2%,

in an attempt to foster home ownership.<sup>24</sup> Throughout the 1980s, several state pension funds experienced substantial losses [Kansas, etc.] due to their ETI programs. A 1994 University of Pennsylvania study further discouraged ETI use by showing that public pension funds which were required to make a certain portion of in-state investments generated lower investment returns than those state plans without this requirement.<sup>25</sup>

These studies and the huge losses experienced by some state pension funds served as a wake-up call to many public pension fund managers who appeared to believe that they could accomplish political goals without sacrificing returns. As a result of these findings, the vast majority of pension fund managers and consultants believe that ETIs violate the fiduciary duty of prudence because ETIs represent a conflict of interest between investment objectives of plan beneficiaries and economic developers.

**Targeted Investing in Use Today**

Though most pension fund managers believe that ETIs are a breach of fiduciary duty, a few states have ETI or ETI-like programs in place. Perhaps the most comprehensive listing of ETI activity is a 1993 Boice Dunham Group study. This analysis defined an ETI as “an investment by a public pension fund, which in addition to offering returns in proportion to financial risk, also offers collateral local economic benefit.” Using this definition, Boice Dunham concluded that ETIs

Investment Vehicle	Percent of Total
Fixed Income	21.6%
Loans to Small Businesses	4.5%
Private Placements	17.0%
Real Estate	69.3%
Construction Loans	4.5%
Residential Mortgages	50.6%
Commercial Mortgages	12.5%
Equity	1.7%
Venture Capital	9.1%
Total	100.0%

Source: Boice Dunham Group (1993).

accounted for \$17.5 billion or 2% of the \$887.3 billion of public plan assets covered in their survey. ETI activity fell into three categories: fixed income, real estate, and venture capital. Residential mortgages accounted for more than half of all ETI activity while venture capital represented less than 10% of ETI activity [0.2% of total public plan assets], or \$1.6 billion.<sup>26</sup>

The second source of information on ETI activity is the General Accounting Office which in 1995 reviewed a survey of 139 of the largest public pension plans in the U.S. Respondents, which represented 85% of the assets of state and local plans, had invested a total of \$19.8 billion in ETIs to promote housing, real estate, and small business development, which amounted to 2.4% of total respondents' assets.

<sup>24</sup> Alicia Munnell, “The Pitfalls of Social Investing: The Case of Public Pensions and Housing,” *New England Economic Review*, September/October 1983.

<sup>25</sup> *Economically Targeted Investments- The Solution: H.R. 1594 – The Pension Protection Act*, Joint Economic Committee Issue Summary, June 6, 1995.

<sup>26</sup> Alicia Munnell and Annika Sunden, “Investment Practices of State and Local Pension Funds: Implications for Social Security Reform,” *Pension Research Council*, August 1999.

A final source on ETIs is the 1991, 1993, 1995, and 1997 PENDAT surveys, which were created from the Surveys of State and Local Employee Retirement Systems for the Public Pension Coordination Council. The PENDAT survey asks “What percentage of the portfolio is directed in-state for

development purposes?” The percentage of total assets designated for in-state investment ranged from 0.10% to 0.37% over the four surveys, with 0.10% in the most recently reported year.

	<b>1991</b>	<b>1993</b>	<b>1995</b>	<b>1997</b>
Percent	0.35%	0.30%	0.37%	0.10%

Source: PENDAT

From these three studies, it appears that venture capital ETIs are rare, and participation in ETIs appears to be dwindling. As part of this research, we surveyed the 33 public pension funds that have invested in private equity for at least ten years and also found that venture capital ETIs are in limited use today. For the few public pension funds that were able to cite specific programs aimed at increasing the availability of venture capital or private equity in their state, a summary of each program is given below.

The most widely recognized venture capital ETI program in use today is the **Texas** Growth Fund [TGF]. TGF was established in the early 1990s with a \$40 million commitment from the Texas Teachers Retirement System. TGF is managed by a private financial intermediary that examines 150-200 business plans a year from companies with substantial operations in Texas or with commitments to establish Texas operations. TGF evaluates these companies for attractive later stage venture capital [no start-ups] and mezzanine investments.<sup>27</sup>

When investing in a company, TGF can only make up 50% of the total investment, and funds from other venture capitalists must make up the remainder of the investment. This structure protects TGF from political pressures since other investors must also buy-off on its investments. This also attracts outside venture capital to Texas since TGF must partner with other venture capitalists on each of its investments.

The state of Texas has addressed the issue of fiduciary duty by not mandating that public pension funds invest in TGF. Therefore TGF must stand on its own merit to attract and retain its Texas pension fund clients.<sup>28</sup> TGF has not yet published return calculations for its fund and there has been no systematic analysis of the economic development benefits of TGF.

The **California** Public Employees Retirement System [CalPERS] has as part of its mission to invest a portion of its fund in investments that strengthen California’s economy. As of October 31, 1999 CalPERS had \$18 billion [11% of the fund] invested in its state’s economy. As part of this in-state focus, the CalPERS board recently set aside \$350 million for investments in venture capital partnerships located in California. CalPERS’s 11% in-state focus is legitimized by the fact that

<sup>27</sup> Annual Report, Texas Growth Fund, 1999.

<sup>28</sup> James Orford, “Targeting Texas,” *Plan Sponsor*, February 1994.

California comprises 14% of the U.S. GDP and that the majority of U.S. venture capital partnerships are located in California.<sup>29</sup>

**New York** is another large state that legitimizes a small in-state focus by its size. The New York State Teachers' Retirement System makes direct in-state investments in housing loans, commercial loans and alternative investments. As of March 31, 1998, this program had allocated \$380 million to in-state alternative investments which represented 0.4% of New York's \$106 billion portfolio.

The State of **Wisconsin** Investment Board [SWIB] has invested in private equity since 1983. Most of these investments have been made using private equity partnerships. However approximately \$750 million per year has been invested directly by SWIB's internal staff. This internal group seeks out private financing opportunities and then directly funds them with Wisconsin pension money. Approximately 80% of these direct investments are loans while the remaining 20% are equity investments. Though no mandate for in-state investing exists, the former director of SWIB's private market investments stated that SWIB usually invested 20% of its allocated funds in Wisconsin companies. With just 20% of the investments being private equity and 20% of these funds staying in Wisconsin, in-state private equity investments are approximately \$30 million per year. Overall, SWIB has achieved a 17% annual return on its buyout investments and 14% on its venture capital investments.

To further increase the amount of venture capital available to Wisconsin entrepreneurs, SWIB is helping to launch a new early-stage venture capital fund. Two venture capital firms will co-manage this \$40-70 million fund that will focus on the technology and life sciences industries. SWIB will contribute less than half of the total fund raised, with the remainder coming from corporate pension funds, endowments and wealthy individuals. A condition of SWIB's investment is that the new venture fund must invest at least 75% of SWIB's contribution in Wisconsin companies. Contributions made by other investors can be invested anywhere in the U.S. This fund hopes to make its first investment later this year.

**Pennsylvania** State Employees' Retirement System [PSERS] has invested funds with 38 venture capital partnerships, 15 of which are committed to invest in Pennsylvania-based companies as part of their venture investment focus. These partnerships have no mandate for a set dollar amount to be invested in Pennsylvania, but make their best effort to make investments in companies either headquartered in Pennsylvania or in companies that provide employment for Pennsylvania citizens. Through this effort, venture capital investments have been made in 44 companies headquartered in Pennsylvania and 12 non-Pennsylvania companies that employ Pennsylvania residents.

To further increase local venture capital availability, PSERS initiated a \$50 million Pennsylvania-focused early-stage venture capital fund. PSERS contributed \$20 million and three large banks, Carnegie Mellon University and several wealthy individuals comprised the remaining \$30 million. The fund's mission is to make 80% of its investments in companies with headquarters or major operations in Pennsylvania or in companies that are considering moving to Pennsylvania. To manage this new fund, PSERS selected an existing Pennsylvania-based venture capital firm that chose to partner with Draper Fisher Jurvetson, a prominent California venture capital firm that has a national network of affiliated funds. This new Pennsylvania focused fund is less than one year old so no return statistics are available. However a partner of this fund stated that they are seeing many Pennsylvania related investment opportunities, especially from Carnegie Mellon University, and have capitalized on several already.

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<sup>29</sup> California Public Employees Retirement System web site, <http://www.calpers.ca.gov/invest/califinv/califinv.htm>.

In the 1980s, the **Michigan** Department of the Treasury [MDT] and the **Ohio** Teachers Fund [OTF] tried to target its venture capital investing in-state. Neither of these states' programs achieved market returns. Due to these lackluster returns and a closer adherence to their fiduciary duty, MDT and OTF repealed their in-state mandates in the 1990s and now do not take geographical location into consideration. However, OTF along with the **Colorado** Public Employees' Retirement System and the **New Hampshire** Retirement System cited the use of an "all else equal" rule. This rule is usually unwritten, but attempts to support local venture capital availability while maintaining fiduciary duty. When one of these pension funds is evaluating two venture capital partnerships, and the two partnerships are deemed equal on all measures, the tie-breaker comes down to which fund is located in-state or has a history of investing in their state. This appears to be a natural inclination of pension fund managers and trustees to favor local partnerships, and it is likely that more than just these three state funds practice the "all else equal" rule.

### ***Findings from Targeted Investing Study***

Though once a popular investment strategy, ETIs have been losing favor with pension fund trustees and managers over the past 5-10 years. California and New York target some of their venture capital investments in-state, however their in-state allocations do not appear to exceed their proportion of U.S. venture funds.

The Texas Growth Fund reviews 150-200 business plans per year and from these selects only 3 or 4 deals. This equates to investing in about 2% of the companies evaluated and illustrates the key to TGF's success – strong deal flow which allows the partnership to be selective and choose only the most promising of investments. Indiana is one-fourth the size of Texas, and it is doubtful that Indiana could generate sufficient in-state deal flow to make the TGF strategy a success here.

Of the states with active targeted investing programs, Indiana is most comparable to Pennsylvania and Wisconsin in terms of the size of their economies. The Pennsylvania and Wisconsin models use investments by corporate pension funds, universities, and wealthy individuals to leverage the public pension investments in their early-stage venture funds. The inclusion of private sector investors reduces the ability of politics to influence investment decisions and adds resources and relationships useful to the venture capital fund. Though both of these programs have an in-state focus, they are less constrained than the Texas Growth Fund in that they have the ability to invest some of their funds out of state. Unfortunately these funds are still in their infancy, and it will be several years before any meaningful conclusions can be drawn from them.

As a first step to increase venture capital availability in Indiana while closely adhering to the pension funds' fiduciary duty, the State funds can encourage the private equity partnerships that they invest in to look for promising investment opportunities in Indiana. To help facilitate interaction between venture capitalists and local entrepreneurs, the public pension funds could post the contact information for the venture funds it has invested in on the Internet. Additionally, the pension funds could ask the venture capitalists to come speak at local Venture Club meetings and other forums where local entrepreneurs could meet these venture capitalists. By promoting Indiana businesses and helping to facilitate relationships between venture capitalists throughout the U.S. and Indiana entrepreneurs, the State pension funds would be lending a hand to state economic development efforts while adhering to their fiduciary duty.

## **VI. Conclusion**

Pensions are the primary source of income for most retirees, and consequently pensions determine lifestyle choices for seniors. Indiana's two largest public pension funds, TRF and PERF, are responsible for investing the pensions of more than 300,000 active and retired State employees. This report has focused on the State's management of these pensions and on steps the State could take to strengthen its plans.

In analyzing PERF and TRF's public equity investment performance since the 1996 Constitutional change, this report found that both State pension funds have achieved very good investment returns, comparable to those achieved by major stock market indices. Though PERF and TRF have used different strategies to invest in public equities, both have been prudent in implementing their strategies and successful in increasing investment returns, reducing portfolio risk and saving taxpayers millions of dollars.

Equity's impact on a portfolio has been shown to be very positive and at least 37 states have chosen to expand the impact of equity by investing in private equity. After evaluating the risks and rewards of private equity, this report concludes that the benefits are great and the risks are low for PERF and TRF to begin investing in private equity. Private equity, when added to a diversified portfolio, has historically increased investment earnings and reduced overall risk – an attractive combination that should be pursued by all prudent investors.

Some states have taken their private equity investing strategy one step further and attempted to direct some of their private equity dollars in-state for economic development purposes. Though nothing is inherently wrong with in-state investing, fiduciary duty mandates that investment decisions be made for the sole purpose and exclusive benefit of pension beneficiaries, not economic developers. Indiana should not mandate any level of in-state investing, but should evaluate the private equity investment opportunities located in Indiana on a risk and reward basis, just as should be done for all investment decisions.

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**APPENDIX A**

**Public Pension Fund Investors in Private Equity**

<b>Public Pension Fund</b>	<b>Total Assets (\$million)</b>	<b>Alternative Allocation</b>
California Public Employees' Retirement System	130,000	6.0%
New York State Common Retirement Fund	96,942	5.0%
Florida State Board of Administration	83,523	5.0%
California State Teachers' Retirement System	65,000	5.0%
New Jersey Division of Investment	64,700	NA
State of Wisconsin Investment Board	54,000	5.0%
State Teachers Retirement System of Ohio	46,000	NA
Ohio Public Employees' Retirement System	45,000	1.0%
Michigan Department of Treasury	41,000	7.5%
New York City Retirement System	36,558	NA
Teacher Retirement System of Texas	36,400	NA
Pennsylvania Public School Employees' Retirement	34,500	5.0%
Washington State Investment Board	33,206	15.0%
Minnesota State Board of Investments	33,200	NA
Virginia Retirement System	33,000	15.0%
Oregon State Treasury	28,000	15.0%
Public Employees' Retirement Association of Colorado	25,000	10.0%
Los Angeles County Employees' Retirement Association	24,941	10.0%
Massachusetts Pension Reserves Investment Trust	23,500	8.0%
Pennsylvania State Employees' Retirement System	21,320	8.0%
State Retirement and Pension System of Maryland	18,600	NA
Illinois State Teachers' Retirement System	18,000	5.0%
State of Connecticut Retirement & Trust Funds	16,000	12.0%
New York City Police Pension Fund	15,400	2.0%
Tennessee Consolidated Retirement System	12,987	NA
Illinois Municipal Retirement Fund	11,706	4.0%
Nevada Public Employees' Retirement	10,791	NA
Illinois State University Retirement System	9,789	4.0%
Iowa Public Employees' Retirement System	9,600	12.0%
Los Angeles Fire & Police Pension System	9,500	3.0%
Alaska State Pension Investment Board	9,214	NA
Kansas Public Employees Retirement System	9,000	5.0%
San Francisco City & County Employees' Retirement	7,900	7.0%
Utah State Retirement Board	7,300	4.0%
Ohio Police & Firemen's Disability & Pension Fund	7,041	1.0%

<b>Public Pension Fund</b>	<b>Total Assets (\$million)</b>	<b>Alternative Allocation</b>
Rhode Island Employees' Retirement System	6,000	5.0%
State of Hawaii Employees' Retirement System	5,700	NA
Montana Board of Investments	5,351	3.0%
Illinois State Board of Investments	5,293	10.0%
Los Angeles City Employees' Retirement System	5,200	3.0%
Louisiana State Employees' Retirement System	5,188	6.0%
District of Columbia Retirement Board	5,016	3.5%
Ohio School Employees' Retirement System	4,009	NA
Idaho Public Employees' Retirement System	4,000	5.0%
Arkansas Teachers' Retirement System	3,900	NA
Wyoming Retirement System	3,900	NA
Philadelphia Board of Pensions & Investments	3,500	3.5%
Army & Air Force Exchange Service	3,300	5.0%
Delaware State Board of Pension Trustees	3,200	10.0%
San Diego County Employees' Retirement System	3,200	NA
Orange County Employees' Retirement System	3,134	5.0%
Maine State Retirement System	3,000	NA
Municipal Employees' Retirement System of Michigan	2,930	NA
San Bernardino County Retirement Association	2,744	NA
New Hampshire Retirement System	2,200	7.0%
Colorado Fire & Police Pension Association	2,103	7.0%
South Dakota Investment Council	2,021	NA
Houston Firefighters' Relief & Retirement	1,537	20.0%
Minneapolis Employees' Retirement Fund	1,500	NA
Milwaukee County Employees' Retirement	1,493	8.0%
Denver Public School Employees' Pension & Benefits Association	1,400	7.0%
Massachusetts Bay Transportation Authority	1,300	6.0%
Dallas City Employees' Retirement Fund	1,200	1.0%
Houston Police Officers' Pension System	1,100	11.5%
San Antonio Firemen's & Policemen's Fund	1,085	10.0%
Houston Municipal Employees' Pension Plan	1,008	15.0%
Minneapolis Teachers' Retirement Fund	700	2.0%
St. Louis City Public School Retirement System	603	10.0%
Shelby County Retirement System	600	NA
US Army NAF Retirement Plan	430	6.0%
Middlesex County Retirement System	426	NA
Plymouth County Retirement System	300	10.0%
Norfolk County Retirement System	200	NA
Rhode Island State Treasury	152	7.5%
Vermont State Retirement System	143	NA



## APPENDIX C

### **Alternatives for Increasing the Availability of Private Equity**

Through our surveying, research and analysis, this study uncovered three additional methods that regions are using to increase the availability of private equity locally. Though two of these strategies do not involve public pension funds, they illustrate alternative means to accomplishing the goal of increasing private equity dollars locally.

The **New Mexico** State Investment Council [NMSIC] manages New Mexico's \$12 billion permanent endowment fund. This endowment has investments in 47 private equity partnerships, eight of which maintain offices in New Mexico and target investments in New Mexico companies. NMSIC allocates 3.3% of its total fund to its national private equity effort and an additional 0.2% for the New Mexico focused program. For the New Mexico targeted program, the partnership agreement states that the venture capital partnerships must invest in New Mexico an amount equal to the amount NMSIC invests in the partnerships. Over the past two years, the eight venture funds with New Mexico offices have combined for only four investments in New Mexico companies.

The major difference between this program and those of other states is that the endowment is not public pension money, but rather royalties and income from land sales and natural resource extraction. Therefore, the in-state venture capital investments are not made using taxpayer dollars or pension funds. New Mexico, like many other states that cannot justify ETIs in light of their fiduciary duty, uses non-tax, non-pension money to support its in-state venture capital initiative.<sup>30</sup>

In June 1996, fifty major **New York City** corporations announced a new \$50 million ETI program financed by \$1 million investments from each contributor. The mission of the fund is "to make hard-eyed venture capital investments, not for private gain, but to create jobs and promote economic development." The fund functions as a private economic development agency, and none of the participants take a profit. The goal of the fund, however, is to be self-sustaining.<sup>31</sup>

The **Pennsylvania** Public School Employees' Retirement Fund [PPSERF] has partnered with Safeguard Scientifics, Inc., a Pennsylvania based publicly traded technology investment holding company, to form Pennsylvania Early Stage Partners [PESP]. PESP is a \$50 million venture capital fund comprised of \$40 million of PPSERF public pension money and \$10 million from Safeguard Scientifics. This fund is focused on making early stage investments in technology, biotechnology, agribusiness and advanced manufacturing companies located in Pennsylvania. Companies will be offered funding ranging from \$250,000 to \$2 million and the ability to tap into Safeguard Scientifics' talent, expertise, and network of contacts. The goal of PESP is to achieve strong investment returns and help fuel the technology related economic sector in Pennsylvania which should provide economic growth, job creation and tax revenue generation.

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<sup>30</sup> Telephone interview, Director of New Mexico State Investment Council, February 22, 2000.

<sup>31</sup> Marc Levine, "The Feasibility of Economically Targeted Investing," University of Wisconsin- Milwaukee Center for Economics Development, Milwaukee, June 1997.